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Amdt. dated November 24, 2003
Reply to Office Action of June 11, 2003

Remarks

The present amendment responds to the Official Action dated June 11, 2003. The Official Action rejected claims 1-14 of the present application under 35 U.S.C. § 103(a) as being unpatentable over Brick et al. United States Patent No. 6,269,342 ("Brick"). This ground of rejection is addressed below following a brief discussion of the present invention to provide context.

Claim 6 has been amended to be in better form for consideration on appeal by including the distinct limitation performing diagnostics "on the memory, the interface and the display and report a detected failure of one or more of the diagnostic tests" which is also found in unamended claim 1. Claims 1-14 are presently pending.

The Present Invention

An electronic price label according to the present invention performs periodic self-diagnosis for faults, and then, it reports detected faults through a visual display or audible tone. Alternatively, these faults are communicated to a central reporting system. The price label includes a processor which controls normal operation for the label, and which also runs a diagnostic program at periodic intervals. The processor, under control of the diagnostic program, exercises each component of the electronic price label and receives responses from the components. The processor then compares the responses received against fault signatures and reports as a failure any response matching a fault signature. The electronic price label performs self diagnosis, relieving the central reporting system from having to make status inquiries to the

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electronic price label and check the reported status against the expected status in order to

determine whether or not the label is faulty. In one aspect of the present invention, during

normal operation, the price label periodically issues a "normal operation" signal. If the central

reporting system fails to detect the "normal operation" signal during a predetermined time

interval, the label is presumed to be faulty and an investigation is performed. In another aspect

of the present invention, the price label transmits an indication to the central reporting system to

report a fault.

The Art Rejections

Claims 1-14 were rejected under 35 U.S.C. 103(a) as obvious based on Brick. These art

rejections are traversed as not supported by the relied upon art as discussed in greater detail

below. As a general matter, it is noted that 35 U.S.C. 103 requires that an invention be

considered as a whole. When so considered, the present claims are not obvious.

Brick is entitled "Programmable Shelf Tag System" and describes a typical prior art

electronic pricing and display system which uses programmable electronic shelf tags. Pricing

information is stored on a main central computer. A portable programming device is moved

through a retail establishment to update, via IR or RF techniques, the price data displayed by the

electronic shelf tags.

In contrast to Brick, the present invention provides techniques for a self testing and self

diagnosing electronic price label. See claim 1, for example, which claims an electronic price

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label comprising "a processor adapted to control operation of the memory, the interface and the

display, the processor being operative to perform diagnostic tests on one or more of the memory,

the interface and the display and report a detected failure of one or more of the diagnostic tests,

said processor operative to perform said diagnostic tests and report the detected failure

independent of a status request transmitted to the electronic price label from a central computer:"

Brick does not teach and does not render obvious such a technique.

Although Examiner acknowledges that the terms "test" and "diagnostics" do not appear

in the disclosure of Brick as pointed out in the Response mailed September 11, 2003, the

Examiner continues to cite that the term "test" as being used in the *Other Publications* section of

Brick. In that section, the text refers to a title of an article which reads "Giant Food plans to test

rival labeling systems, Supermarket New, vol. 43, n 28, p. 13; Jul. 1993." As used therein, the

term *test* is a verb describing in a general sense a comparison between Giant Food's product and

a rival's product without any discussion of any features responsible for such comparison. In

stark contrast, the present invention performs self diagnostic tests in an electronic price label and

reports the detected failure independent of a status request transmitted to the electronic price

label from a central computer. The Examiner's reference to this use of the term *test* in Brick

provides absolutely no support for rejecting the claims of the present invention.

The Official Action asserts that the "updating" operation disclosed by Brick at col. 15 has

"broad scope and content [which] may reasonably encompass the term test." At col. 15 of Brick,

Brick discloses updating the price data on an electronic shelf tag and broadcasting price data

updates from a portable device to many electronic shelf tags. See col. 15, lines 18-22, for

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example, where Brick recites "associated 'updated' pricing data which are to be broadcast, can be

created or modified based upon the most current location data."

According to Merriam-Webster Dictionary, the term *update* means "to bring up to date"

which is how Brick uses this term and the term *test* means "a critical examination or evaluation

or a means or result of testing." The present invention uses the plain meaning of the term *test* by

performing self diagnostic tests within the electronic price label. See page 7, lines 11-13, for

example, where the present invention detects faults such as low or dead battery and stuck

pushbuttons. Other examples of faults detected and reported include detecting faulty receivers

and transmitters, inoperable memory registers, and memory content verification. In referring to

the processor within the electronic price label, claim 1 reads "the processor being operative to

perform diagnostic tests on one or more of the memory, the interface and the display and report a

detected failure of one or more of the diagnostic tests, said processor operative to perform said

diagnostic tests and report the detected failure independent of a status request transmitted to the

electronic price label from a central computer." (emphasis added).

The Examiner stretches the meaning of the term "update" further than it can fairly be

stretched when he attempts to broaden the definition of "update" to encompass its meaning to

include "diagnostic testing" as used by the present invention. Clearly, these distinct and

incongruent definitions do not allow the term "update" to include the meaning of the term "test"

as suggested by the Examiner.

Furthermore, even should Brick's "update" be construed as a "test" in some broad senses,

Brick's invention does not perform self-diagnostic tests and does not report failure conditions as

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claimed. The Official Action also states that "To perform diagnostic or self-diagnostic tests by

Brick would have been obvious to one of ordinary skill in the art. Doing such would provide an

inherent function of the Brick disclosure." Applicant respectfully disagrees.

According to the MPEP Section 2112, "[t]o establish inherency, the extrinsic evidence

'must make clear that the missing descriptive matter is necessarily present in the thing described

in the reference, and that it would be so recognized by persons of ordinary skill. Inherency,

however, may not be established by probabilities or possibilities. The mere fact that a certain

thing may result from a given set of circumstances is not sufficient.' " The MPEP continues by

further stating "[i]n relying upon the theory of inherency, the examiner must provide a basis in

fact and/or technical reasoning to reasonably support the determination that the allegedly inherent

characteristic necessarily flows from the teachings of the applied prior art," citing *Ex parte Levy*,

17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The Examiner has

not met this burden here.

As addressed above, Brick merely performs price updates utilizing a portable device

external to the electronic shelf tag to provide quick and easy price changes throughout the store.

Col. 15, lines 61-63. In contrast to Brick, claim 6 of the present invention recites "each of the

labels being operative to perform internal self-diagnostic tests on the memory, the interface and

the display and report a detected failure of one or more of the diagnostic tests independent of a

status request issued by the central processor, and provide an alert or indication reporting failure

of the self-diagnostic test." (emphasis added) Simply put, the presently claimed approach is not

taught and is not rendered obvious by Brick.

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The Examiner implicitly admits the failings of Brick by attempting to buttress his

argument by subsequently stating "performing self diagnostics is well known in the art" and "to

periodically perform a self-diagnostic tests[sic] on each of the shelf labels independent of a status

request issued by the central processor for Brick would have been inherently obvious to one of

ordinary skill in the art." Applicant respectfully disagrees. The Examiner again makes an

inherency argument without meeting the well defined and serious burdens discussed above. This

argument is traversed and per MPEP §2144.04(C) the Examiner is requested both to supply and

apply art if the action is maintained. The Examiner has failed to provide a reference of an

electronic price label which performs self diagnostics which report detected failures as claimed

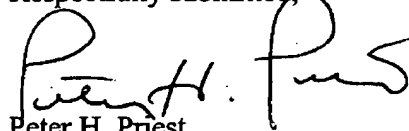or any reference that he contends should be combined with Brick.

In response to the Applicant's previous request for clarification regarding the application

of the disclosure of Brick to each of the elements of the present claims, the Examiner provides an

Official Action improperly relying upon inherency and what is purportedly well known in the art

without providing supporting documentary evidence. The rejection should be promptly

withdrawn.

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Conclusion

All of the presently pending claims, appearing to define over the applied reference,

withdrawal of the present rejection and prompt allowance are requested.

Respectfully submitted,

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